

REMARKS

As a preliminary matter, the undersigned gratefully acknowledges the courtesies extended by the Examiner in the interview of April 22, 2002.

This amendment, submitted in further response to the Office Action dated December 28, 2001, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Applicant amends independent claims 2, 4-6, 8 and 10-11 to include the features of prior pending claim 17. This Amendment should be entered because it does not raise new issues requiring further consideration and places the claims in condition for allowance. In particular, the cited combination of Nakai and Okumura do not teach the features of the independent claims for the reasons of record. Additional claims 28-34 are added to describe features of the invention more particularly and are also distinguishable over the art in view of the direction connection of the ferroelectric gates to respective data lines.


In view of the above, Applicant submits that claims 2-6, 8-16, 18-27 and additional claims 28-34 are in condition for allowance. Therefore it is respectfully requested that the subject application be passed to issue at the earliest possible time. The Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

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Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

2 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit writes data to said ferroelectric gate field-effect transistors in order of a row,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

4 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit changes a ferroelectric gate of said ferroelectric gate field-effect transistor to a first polarization state and then writes data in accordance with input of data, changing said first polarization state to a second polarization state, or said first polarization state, in accordance with said input of data,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

5 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit performs row selection with a gate

electrode of said ferroelectric gate field-effect transistor and writes data with a source electrode and drain electrode of said ferroelectric gate field-effect transistor and a substrate electrode or back-surface electrode of said ferroelectric gate field-effect transistor,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

6 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes wherein said drive circuit performs modulation by binary static drive,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

8 (Twice Amended). A two-dimensional active-matrix type light-emitting device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light-emitting layers, each light-emitting layer being interposed between said pixel electrode and said counter electrode for emitting light in accordance with current flowing through the light-emitting layer between said pixel electrode and said counter electrode;

and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit writes data to said ferroelectric gate field-effect transistors in order of a row,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

10 (Twice Amended). A two-dimensional active-matrix type light-emitting device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light-emitting layers, each light-emitting layer being interposed between said pixel electrode and said counter electrode for emitting light in accordance with current flowing through the light-emitting layer between said pixel electrode and said counter electrode;

and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit changes a ferroelectric gate of said ferroelectric gate field effect transistor to a first polarization state and then writes data in accordance with input of data, changing said first polarization state to a second polarization state, or said first polarization state, in accordance with said input of data,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

11 (Twice Amended). A two-dimensional active-matrix type light-emitting device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light-emitting layers, each light-emitting layer being interposed between said pixel electrode and said counter electrode for emitting light in accordance with current flowing through the light-emitting layer between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit performs row selection with a gate electrode of said ferroelectric gate field-effect transistor and writes data with a source electrode and drain electrode of said ferroelectric gate field-effect transistor and a substrate electrode or back-surface electrode of said ferroelectric gate field-effect transistor,

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wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

Claim 17 is canceled without prejudice or disclaimer.

Claims 28-34 are added as new claims.